REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Status of Claims:

Claims 4-6 are currently being cancelled.

Claims 1, 7 and 11 are currently being amended.

Claim 12 is currently being added.

This amendment and reply amends, adds and cancels claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claims remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending, adding and canceling the claims as set forth above, claims 1-3 and 7-12 are now pending in this application.

Claim Rejections – Prior Art:

In the Office Action, claims 1-3 and 11 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,138,229 to Kucukcakar et al.; claims 4-9 were rejected under 35 U.S.C. § 103(b) as being unpatentable over Kucukcakar et al. in view of U.S. Patent No. 5,239,654 to Ing-Simmons et al.; and claim 10 was rejected under 35 U.S.C. § 103(b) as being unpatentable over Kucukcakar et al. in view of U.S. Patent No. 4,758,885 to Sasaki. These rejections are traversed for the reasons given below.

First, please note that presently pending independent claim 1 has been amended to include the features of now-canceled claims 4, 5 and 6, whereby presently pending independent claim 11 has been amended in a similar manner.

In more detail, presently pending claim 1 recites a plurality of co-processors (see, for example, co-processors 14-16 shown in Figure 11 of the drawings), an arbitrating processor (see, for example, arbitrating processor 11 shown in Figure 11 of the drawings), and a main CPU (see, for example, main CPU 13 shown in Figure 11 of the drawings). Each of the co-processors has a variable processing unit and a fixed processing unit. Therefore, in a processor system or a multiprocessor system using the same as a co-processor, appropriate processing functions are generated and utilized in not only the fixed processing unit (see, for

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example, fixed processing unit 28a shown in Figure 1 of the drawings) but also the variable processing unit 27 (see, for example, fixed processing unit 27a shown in Figure 1 of the drawings), if necessary, by the functions of a control unit (see, for example, control unit 20 shown in Figure 1 of the drawings) in the processor or the functions of the arbitrating processor in the multiprocessor system. Consequently, the task required by a program can be processed at a high speed.

On the other hand, Kucukcakar et al. merely discloses a system having a fixed processing unit and a variable processing unit. The system of Kucukcakar et al. does not have a plurality of co-processors, each having a fixed processing unit and a variable processing unit. Nor does it have an arbitrating unit, which analyzes a task and allocates the task to a plurality of co-processors in accordance with a result of the analysis. Thus, Kucukcakar et al. or the other references do not disclose the functions recited in the amended claim 1 of the present application.

Turning now to Ing-Simmons, which was cited against claim 5 (and whereby those features are now incorporated into claim 1) while this reference discloses multi-processor system whereby processors can function as either MIMD mode or SIMD mode, none of these processors has both a fixed processing unit and a variable processing unit. Still further, the Office Action asserts that Ing-Simmons' master processor corresponds to the claimed arbitrating unit, but this assertion is incorrect. While Ing-Simmons' master processor is used to schedule and control the entire system, it does not teach or suggest that the master processor determines whether a task is to be allocated to only the main processor or whether the task is to be allocated to the main processor and the plurality of processors, as specifically recited in claim 1 (whereby those features are of original claim 6, now incorporated into claim 1). It is noted that page 7 of the Office Action asserts that "the Master processor receives all instructions and controls transferring and scheduling accordingly, including which processor, itself or one of the other co-processors, executes the instructions." However, this assertion is incorrect, since Ing-Simmons's master processor only performs scheduling for the processors on the crossbar switch, and whereby Ing-Simmons' master processor does not itself execute any tasks.

Accordingly, presently pending independent claims 1 and 11 are patentable over the combined teachings of Kucukcakar et al. and Ing-Simmons et al.

New Claim:

New claim 12 has been added based on features described on pages 14 and 15 of the specification, whereby such features are believed to provide a separate basis of patentability for that claim, beyond the reasons given above for its base claim.

Conclusion:

Since all of the issues raised in the Office Action have been addressed in this Amendment and Reply, Applicant believes that the present application is now in condition for allowance, and an early indication of allowance is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date <u>October 1, 2007</u>   By _____

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